TITLE OF THE INVENTION

ESTIMATING FORECAST VALUE METHOD, SYSTEM, AND PROGRAM

BACKGROUND OF THE INVENTION

5   Field of the Invention

The present invention relates to a method for

forecasting a product demand and, more particularly, to a

method for collaboratively forecasting the demand by an order

side and a delivery side via a network, typically, e.g., the

10   Internet.

Description of the Related Art

Recently, supply chain management is widespread whereby

processing from the procurement of materials to the delivery

of products becomes efficient and stocks are reduced by

15   sharing stock information and sales performance of different

companies. In particular, CPFR (Collaborative Planning,

Forecasting and Replenishment) attracts attention, in which

a production plan and an ordering plan are optimized, the

stockout rate is reduced, inventories are reduced, and sales

20   are increased by sharing forecasts such as volume of sales

between companies. The CPFR is prescribed by VICS (Voluntary

Interindustry Commerce Standards).

In the conventional CPFR system, a sales company for

selling a product and a purchase company for buying the product

25   form forecast values such as the volume of sales and the order

quantity, and register them to a forecast sharing server. Here, the volume of sales denotes the quantity of products sold to another company and personals by the purchase company, and the order quantity denotes the quantity of products

5   ordered to the sales company by the purchase company.

Next, when the forecast value matches exception criteria to find an improper forecast value, the forecast sharing server determines the forecast value as an exception and sends a notification indicating the forecast value as the

10   exception to the sales company and the purchase company. According to the exception criteria, for example, the forecast value of the registered sales company is compared with that of the registered purchase company and the difference or ratio between the forecast values is over a threshold which is

15   previously set by the registered sales company and the registered purchase company. The sales company and the purchase company which receive the notification find out the cause of the exception by mutual consultation, and correct the forecast values.

20   Japanese Unexamined Patent Application Publication No. 5-173602.

A conventional CPFR system has the following problems because the exception criteria are applied to only the forecast value as a target so as to determine the exception.

25   That is, first, when the forecast values formed based

on individual factors by the sales company and the purchase

company do not accidentally match the exception criteria, the

forecast values are not determined as the exception. For

example, it is assumed that the purchase company plans the

5   sale 50% off of a products having the average volume of sales

of 100 and, then, forecasts the volume of sales as 150 products

larger than the usual volume of sales by 50% and, on the other

hand, the sales company further forecasts the sale on

magazines and forecasts the volume of sales as the 150 products.

10   Actually, there is a possibility that the volume of sales is

larger by 50% under synergy effect of both the 50% off-sale

and the featuring on the magazine. This phenomenon should

be notified to both the sales company and the purchase company.

However, since the forecast values of the sales company and

15   the purchase company are not over the threshold, they are not

determined as the exception.

Secondarily, when the forecast values of the sales

company and the purchase company are determined as the

exception, the reason of the exception is not determined.

20   Therefore, a person responsible for the forecast of the sales

company and a person responsible for the forecast of the

purchase company must consult and find out the reason. For

example, it is assumed that the purchase company sells off,

by 50%, 100 products as the average volume of sales, then,

25   it forecasts the volume of sales as 150 products, 50% larger

than the usual volume of sales and, on the other hand, the sales company forecasts the volume of sales as 100 products as usual. In this case, although the exception is generated, both the sales company and the purchase company can refer to

5   only the 150 or 100 products as the forecast values and cannot determine the basis for calculation of the forecast values. Thus, only the consultation to the person responsible for the forecast of the partner company enables the correction of the forecast values.

10   Thirdly, the forecast value must be recalculated and be corrected based on the found reason. In the above-described case, it is assumed that the non-recognition of the 50% off-sale of the sales company causes the generation of the exception as a result of the consultation of the sales

15   company with the purchase company. In this case, an in-house system or the person responsible must calculate again and correct the forecast value in consideration of the 50% off-sale.

20   SUMMARY OF THE INVENTION

        Accordingly, it is one object of the present invention to provide a method for determining an exception so as to detect the different estimation of a future demand which is not conventionally found because the forecast values for the

25   demand accidentally match each other.

It is another object of the present invention to easily specify an exception factor when the exception is determined.

It is another object of the present invention to easily correct the forecast value.

5   In order to accomplish the above objects, in a system for connecting a sales company terminal and a purchase company terminal to a forecast sharing server via the Internet, not only the forecast value but also basis information obtained by patterning a factor for calculating the forecast value is
10   shared, an exception is determined in accordance with the following processing routine, and recommended values for correction of the forecast value and the basis information are calculated.

First, the basis information and the importance
15   indicating, as a number, the degree of importance of the basis information are defined and registered to the forecast sharing server. For example, "sale 50% off" and "magazine feature" are defined as the basis information.

The sales company and the purchase company register,
20   to the forecast sharing server, exception criteria of the forecast value for determining the exception based on the forecast values thereof, exception criteria of the basis information for determining the exception based on the basis information thereof, a recommended forecast value
25   calculating method as a method for calculating a recommended

value of the forecast value when the exception is determined, and a recommended basis information calculating method as a method for calculating a correct value of the basis information. For example, "forecast value of sales company

5   - forecast value of purchase company < threshold" is defined as the exception criteria of the forecast value. For example, "basis information of sales company ⊂ basis information of purchase company" is defined as the exception criteria of the basis information. Further, "match forecast value of sales

10 company to forecast value of purchase company" is defined as the recommended forecast value calculating method. In addition, "match basis information of sales company to basis information of purchase company" is defined as the recommended basis information calculating method.

15   Next, the sales company and the purchase company register the formed forecast values and the basis information to the forecast sharing server.

        The forecast sharing server first determines whether or not the forecast values of the sales company and the

20 purchase company match the exception criteria of the forecast value. If it is determined that the forecast values match the exception criteria, the forecast sharing server determines the forecast values as the exception. Further, if it is determined that the basis information of the sales

25 company and the purchase company matches, the exception

criteria of the basis information, the forecast sharing server

determine the basis information as the exception. Upon

determining the exception of the basis information, the basis

information used for the determination is designated

5   depending on the importance, such as the determination of the

exception using only the basis information with a special

importance or more.

When any of the forecast value and the basis information

is determined as the exception, the recommended forecast value

10   and the recommended basis information are calculated and

notified to a user in accordance with the following processing

routine.

First, the recommended forecast value is calculated

from the forecast values of the sales company and the purchase

15   company based on the recommended forecast value calculating

method. Next, the recommended basis information is

calculated from the basis information of the sales company

and the purchase company based on the recommended basis

information calculating method. Upon calculating the

20   recommended basis information, the basis information can be

designated depending on the importance, for example, the

recommended basis information is calculated by use of only

the basis information with a special importance or more.

After that, the forecast sharing server sends a

25   notification indicating the exception, the recommended

forecast value, and the recommended basis information to the

sales company and the purchase company. The forecast sharing

server may automatically correct the forecast value and the

basis information based on the recommended forecast value and

5   the recommended basis information before notification.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a diagram showing the structure of a forecast

value estimating system and the flow of processing thereof

10   according to an embodiment of the present invention; .

Fig. 2 is a diagram showing a screen for setting

exception criteria and a recommended value calculating method

according to the embodiment of the present invention;

Fig. 3 is a flowchart for processing for determining

15   exception, processing for calculating a recommended value,

and processing for automatic correction;

Fig. 4 is a flowchart for the processing for determining

the exception according to the embodiment of the present

invention;

20   Fig. 5 is a diagram showing a screen for exception

according to the embodiment of the present invention;

Fig. 6 is a table for the forecast value and basis

information according to the embodiment of the present

invention;

25   Fig. 7 is a table for defining the basis information

according to the embodiment of the present invention;

Fig. 8 is a table for the exception criteria and the recommended value calculating method according to the embodiment of the present invention;

5   Fig. 9 is a table for the exception, the recommended forecast value, and the recommended basis information according to the embodiment of the present invention;

Fig. 10 is a diagram showing a screen for notification to a sales company according to the embodiment of the present

10   invention;

Fig. 11 is a diagram showing a screen for notification to a purchase company according to the embodiment of the present invention;

Fig. 12 is a flowchart for processing for notification

15   according to the embodiment of the present invention;

Fig. 13 is a table for a company according to the embodiment of the present invention;

Fig. 14 is a diagram showing one screen for exception according to the embodiment of the present invention; and

20   Fig. 15 is a diagram showing another screen for exception according to the embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Hereinbelow, a detailed description is given of an

25   embodiment of the present invention with reference to the

drawings.

Figs. 1, 3, 4, and 12 show flowcharts of processing according to the embodiment. Figs. 2, 5, 10, 11, 14, and 15 show screens according to the embodiment. Figs. 6 to 9 and

5   13 show tables according to the embodiment.

First, a description is given of the entire structure of a forecast sharing system shown in Fig. 1.

The forecast sharing system comprises: a forecast sharing server 11; a sales company terminal 12; a purchase

10   company terminal 13; and a communication network 14 for connecting the abovementioned components. The communication network 14 is the Internet, LAN, or communication network using arbitrary wiring or radio waves.

The forecast sharing server 11 is an information

15   processing device such as a workstation arranged to the sales company, the purchase company, or another company. The forecast sharing server 11 has a function for receiving a forecast value, basis information, exception criteria, a recommended forecast value calculating method, and a

20   recommended basis information calculating method transmitted from the sales company terminal 12 or the purchase company terminal 13, which will be described later. Further, the forecast sharing server 11 has functions for determining the exception, for calculating the recommended forecast value,

25   and the recommended basis information, which will be described

later, based on the received information, for correcting the forecast value and the basis information, and for transmitting the correction result to the sales company terminal 12 and the purchase company terminal 13.

5   The sales company terminal 12 is an information processing device, such as a personal computer, arranged to the sales company, etc. The sales company terminal 12 has a function for transmitting, to the forecast sharing server 11, the forecast value and the basis information calculated

10   by a person responsible or an in-house system in the sales company, which will be described later, a function for transmitting, to the forecast sharing server 11, the exception criteria, the recommended forecast value calculating method, and the recommended basis information calculating method

15   determined by the person responsible in the sales company, which will be described later, and a function for displaying the exception, the recommended forecast value, and the recommended basis information transmitted from the forecast sharing server 11, which will be described later.

20   The purchase company terminal 13 is an information processing device, such as a personal computer, arranged to the purchase company, etc. The purchase company terminal 13 has a function for transmitting, to the forecast sharing server 11, the forecast value and the basis information

25   calculated by a person responsible or an in-house system in

the purchase company, which will be described later, a

function for transmitting, to the forecast sharing server 11,

the exception criteria, the recommended forecast value

calculating method, and the recommended basis information

5   calculating method determined by the person responsible in

the purchase company, which will be described later, and a

function for displaying the exception, the recommended

forecast value, and the recommended basis information

transmitted from the forecast sharing server 11, which will

10   be described later.

According to the embodiment, the forecast sharing

server 11, the sales company terminal 12, and the purchase

company terminal 13 comprise the three individual information

processing devices. However, the forecast sharing server 11

15   may comprise the same information processing device as that

of the sales company terminal 12 or the purchase company

terminal 13.

The abovementioned forecast value is a forecast in a

specific index on a product sold to the purchase company by

20   the sales company. The index includes a sales forecast as

the amount of products sold to a company or person by the

purchase company and an ordering forecast as the amount of

products purchased from the sales company by the purchase

company. The sales company and the purchase company

25   independently form one forecast value for the same index per

combination of product type and term.

The term denotes an arbitrary fixing time period such as one day, one week, or one month. It is assumed that one week as one term includes a first week/June, a second week/June,

5 a third week/June, and the like. The sales company and the sales company form the forecast values and the basis information, which will be described later, in accordance with the same definition of term.

The abovementioned basis information is obtained by

10 patterning events of special sales and advertisement which influence on the forecast value. The used basis information is pervasively defined by the sales company and the purchase company, and is stored in the forecast sharing server 11. The sales company and the purchase company independently form at

15 least one piece of the basis information per combination of product type and term.

In the abovementioned exception, the forecast values or basis information independently formed by the sales company and the purchase company match the exception criteria, and

20 are determined by the forecast sharing server 11. The exception criteria are formed by the sales company and the purchase company independently or collaboratively, and are a rule for determining the difference in forecast values or the difference in basis information. For example, the

25 exception criteria correspond to an unallowable range of the

difference in forecast values formed by the sales company and
the purchase company or to a situation in which the basis
information of the sales company and the purchase company does
not match each other. The exception criteria will be

5   described later.

According to the recommended forecast value calculating
method and the recommended basis information calculating
method, the recommended values are calculated to correct the
forecast value and the basis information determined as the

10   exceptions. The recommended forecast calculating method and
the recommended basis information calculating method are set
by the sales company and the purchase company independently
or collaboratively and are registered in the forecast sharing
server 11. The forecast sharing server 11 forms the

15   recommended forecast value and the recommended basis
information from the forecast value and the basis information
based on the setting. The recommended forecast value and the
recommended basis information are collectively referred to
as a recommended value. The recommended forecast value

20   calculating method and the recommended basis information
calculating method are collectively referred to as a
recommended value calculating method.

The processing flow is described according to the
embodiment with reference to Fig. 1.

25   First, in step S101, the forecast sharing server 11

receives the exception criteria and the recommended value
calculating method transmitted from the sales company
terminal 12 and the purchase company terminal 13, and stores
them in a table T81 for the exception criteria and the

5   recommended value calculating method.

In step S102, the forecast sharing server 11 receives
the forecast value and the basis information transmitted from
the sales company terminal 12 and the purchase company
terminal 13 and stores them in a table T61 for the forecast

10 value and the basis information.

In step S103, the forecast sharing server 11 determines
the exception based on information in the table T81 for the
exception criteria and the recommended value calculating
method, a table T71 for defining the basis information, and

15 the table T61 for the forecast value and the basis information,
calculates the recommended forecast value and the recommended
basis information, and stores the calculation results to a
table T91 for the exception, the recommended forecast value,
and the recommended basis information.

20   Finally, in step S104, the forecast sharing server 11
sends a notification indicating the exception, the
recommended forecast value, and the recommended basis
information to the sales company terminal 12 and the purchase
company terminal 13 based on the information in the table T91

25 for the exception, the recommended forecast value, and the

recommended basis information. The information is notified
by email and a transmitting destination address is obtained
from a table T31 for company.

Hereinbelow, the above methods are described with
5   reference to the drawings.

First, a description is given of the method for
registering the exception criteria and the recommended value
calculating method (step S101).

The sales company terminal 12 or the purchase company
10   terminal 13 accesses the forecast sharing server 11, thereby
displaying, on a www browser, a screen 21 for setting the
exception criteria and the recommended value calculating
method as shown in Fig. 2. On this screen 21, one exception
criterion and one recommended value calculating method are
15   set by input information in a setting index, which will be
described later.

On the screen 21 for setting the exception criteria and
the recommended value calculating method, the forecast value
and the basis information are designated in a box 22 for a
20   target forecast value and basis information, as application
targets of the exception criteria and the recommended value
calculating method set thereon. Further, a forming company
number for forming the exception criteria and the recommended
value calculating method is set in a field 221 for the forming
25   company, and a transaction company number of the forming

company is set on a field 222 for the transaction company.

The field 221 for the forming company and the field 222 for

the transaction company are designated by use of a company

number 311 in the table T31 for the company, which will be

5   described later. Furthermore, a product number for

identifying the type of product is set in a field 223 for a

product number. A range of a target term is set in a field

224 and a field 225. It is designated on the field 224 which

week is set as the start of term after a processing date for

10   searching the exception. It is designated on the field 225

which week is set as the end of term after the processing date

for searching the exception. The description of 1 and 4 in

Fig. 2 mean that when the processing date for searching the

exception is the fourth week in May, the term for determining

15   the exceptions for the forecast value and the basis

information is from the first week in July, as a week after

one week from the fourth week in May, to the fourth week in

June, as a week after four weeks from the first week in June.

Although the relative term range is designated, the term may

20   directly be designated, such as a term from the first to fourth

weeks in June.

The exception criteria of the forecast value is set in

a box 25 for the exception criteria of the forecast value.

The exception criteria are set by selecting any of radio

25   buttons 251 to 257. When the radio button 251 is selected,

the forecast value is not applied to the determination of the exception. When any of the radio buttons 252 to 257 is selected, the exception criteria is set to determine the exception when the forecast value of the forming company and

5   the forecast value of the transaction company match any of relations described on the right of the radio buttons. A threshold for the exception as a right side of the relations is set in a field 258 for the threshold for exception.

The basis information is designated in a box 23 for the

10   target basis information, as targets for determining the exception and for calculating the recommended value. The basis information is designated by selecting any of radio buttons 231 to 234. The selection of the radio button 231 causes all the basis information to become the target. The

15   selection of the radio button 232 causes only the basis information having the importance higher than that set in a field 233 for the lowest importance to become the target. The selection of the radio button 234 causes only a plurality of pieces of the basis information limited by the target term

20   and product number with the highest importance to become the targets of the determination of exception and the calculation of recommended basis information among the plurality of the basis information, upon determining the exception of the basis information and calculating the recommended value. In

25   addition to the target basis information shown here, the

target basis information may be designated by conditions of "target basis information including that with the first to n-th (n: arbitrary natural number) importance", "target basis information including that with the importance lower by n from

5   the highest importance", "target basis information including that with the lowest importance", and "target basis information including that with the importance x (x: arbitrary importance) or lower".

The exception criteria of the basis information is set

10   to a box 26 for the exception criteria of the basis information. The exception criteria are set by selecting check boxes 261 to 265. A plurality of check boxes can be simultaneously selected from the check boxes 261 to 265. When the basis information matches any of the selected criteria and then it

15   is determined as the exception, it is set as the exception criteria. When no check box is selected, the basis information is not applied to the determination of the exception.

The method for calculating the recommended forecast

20   value is set to a box 27 for the recommended forecast value calculating method, upon determining the exception. The recommended forecast value is set by selecting one of radio buttons 271 to 273. In addition to the methods shown in the radio buttons 271 to 273, the recommended forecast value may

25   be calculated by methods of "match forecast values of both

companies to larger one", "match forecast values of both
companies to smaller one", and "match forecast values of both
companies to the average forecast value".

Upon determining the exception, the method for
5   calculating the recommended basis information is set to a box
28 for the recommended basis information calculating method.
The recommended basis information is set by selecting one of
radio boxes 281 to 285.

It is set to a box 24 for automatic correction, whether
10   or not the forecast value and the basis information are
automatically corrected by use of the recommended forecast
value and the recommended basis information calculated by the
recommended forecast value calculating method and the
recommended basis information calculating method.

15   It is set to a box 29 for notification, whether or not
a screen 41 for notification shown in Fig. 10 is transmitted
to the forming company and the transaction company.

After setting the fields on the screen 21 for setting
the exception criteria and the recommended value calculating
20   method, the pressing operation of an add button 211 causes
the exception criteria and the recommended value calculating
method to additionally be registered to the table T81 for the
exception criteria and recommended value calculating method.
The pressing operation of a cancel button 212 causes the
25   closing and ending operation of the screen 21 for setting the

exception criteria and the recommended value calculating method, without registering the exception criteria and the recommended value calculating method.

The exception criteria and the recommended value calculating method are registered by using the screen 21 for setting the exception criteria and the recommended value calculating method. However, the setting contents may be registered to the table T81 for the exception criteria and the recommended value calculating method by receiving described files by the forecast sharing server 11 from the sales company terminal 12 or the purchase company terminal 13.

Here, a description is given of the table T31 for company for storing information on the companies which share the forecast with reference to Fig. 13. Information on one company is stored in one row in the table T13 for company. The table T31 for company stores the company number 311 as an identification number of the company and an email address 312. After that, a column for designating the company in the tables stores the company number 311 defined by the table T13 for company.

Next, a description is given of the table T81 for the exception criteria and the recommended calculating method with reference to Fig. 8.

The table T81 for the exception criteria and the

recommended value calculating method stores, every row, one

exception criterion and one recommended value calculating

methods set on the screen 21 for setting the exception criteria

and the recommended value calculating method.

5   An identification number of the criteria number formed

by the forecast sharing server 11 is stored in a column for

an exception criteria number 811. Data in the field 221 for

the forming company is stored in a column for a forming company

812. Data in the field 222 for the transaction company is

10   stored in a column for a transaction company 813. Data in

the field 223 for the product number is stored in a column

for a product number 814. Data in the field 224 is stored

in a column for a start of term 815. Data in the field 225

is stored in a column for an end of term 816.

15   A number in parentheses described to the right of the

selected one of the radio buttons 231 to 234 is stored in a

column for a target basis information 817. Data in the field

233 for the lowest importance is stored in a column for a lowest

importance 818. A number in parentheses described to the

20   right of the selected one of the radio buttons 251 to 257 is

stored in a column for an exception criteria 819 of the

forecast value. Data in the field 258 for the threshold for

the exception is stored in a column for a threshold 820 for

the exception. Symbols "o" and "×" are stored in a column

25   for a basis information relation 1 (821) upon selecting "YES"

and "NO" in the box 261, respectively. Similarly, Symbols "o" and "×" are stored in columns for basis information relations 2 to 5 (822 to 825) upon selecting "YES" and "NO" in the boxes 262 to 265, respectively. A number in

5   parentheses described to the right of the selected one of the radio buttons 271 to 273 is stored in a column for a recommended forecast value calculating method 826. A number in parentheses described to the right of the selected one of the radio buttons 281 to 285 is stored in a column for a recommended

10 basis information calculating method 827. Symbols "o" and "×" are stored in a column for automatic correction 828 upon selecting "YES" and "NO" in the box 24 for the automatic correction, respectively. Symbols "o" and "×" are stored in a column for notification 829 to the forming company in the

15 case of the selection and the non-selection of the check boxes 291, respectively. Symbols "o" and "×" are stored in a column for notification 830 to the transaction company in the case of the selection and the non-selection of the check boxes 292, respectively.

20   Referring to Fig. 2, the setting is displayed on the screen 21 for setting the exception criteria and the recommended value calculating method. Upon pressing the add button 211, data in a row 8101 is stored in the table T81 for the exception criteria and the recommended calculating

25 method.

Next, a description is given of the forecast value and the basis information which are received by the forecast sharing server 11 in the processing for receiving the forecast value and the basis information (step S102).

First, a description is given of the table T71 for defining the basis information for storing the definition of the basis information with the reference to Fig. 7.

The table T71 for defining the basis information stores the definition of single basis information per row. The table T71 for defining the basis information stores a basis information number 711 as an identification number of the basis information, a basis information name 712, and an importance 713, as contents for defining the basis information. The basis information number 711 defined by the table T71 for defining the basis information is stored in the basis information in the tables, and a plurality of pieces of the basis information are stored with the basis information number 711 which is partitioned by using comma (,) from the basis information. The basis information name 712 is displayed to the basis information on a screen 51 for the exception, a screen 41 for notification, and a screen 45 for notification.

Next, the table T61 for the forecast value and the basis information will be described with reference to Fig. 6.

The table T61 for the forecast value and the basis information stores a forecast forming company 611 as the

company for forming the forecast, a forecast sharing company 612 as a company for sharing the forecast, a product number 613, a term 614, a forecast value 615, and basis information 616.

5   For example, the sales company (company No. 1001) forms a forecast value 196 of the product (product No. 0001) which is treated to the purchase company (company No. 1002) in the first week on July. Further, the sales company (company No. 1001) forms the basis information indicating "sale 20% off"

10   (basis information No. 2). Upon transmitting the formed forecast value and basis information from the sales company terminal 12 to the forecast sharing server 11, the forecast sharing server 11 stores them on a row 6105 as shown in Fig. 6.

15   Next, a description is given of the processing for determining the exception and calculating the recommended value (step S103) with reference to the flowchart shown in Fig. 3.

        In step S301, the forecast sharing server 11 determines

20   the exception according to a method as will be described later, and writes the exceptions to the table T91 for the exception, the recommended forecast value, and the recommended basis information. For the exceptions in the table T91 for the exception, the recommended forecast value, and the

25   recommended basis information written in step S301, the

processing in steps S302 to S316 is repeatedly executed. In step S303, the forecast sharing server 11 reads the recommended forecast value calculating method 826, the recommended basis information calculating method 827, and the

5   automatic correction 828, as the exception criteria and the recommended value calculating method of the same exception criteria number 811 in the table T81 for the exception criteria and the recommended value calculating method as the exception criteria number 912 in the table T91 for the exception, the

10   recommended forecast value, and the recommended basis information.

In step S304, the recommended forecast value is calculated based on the recommended forecast value calculating method 826 read in step S303. In step S305, it

15   is determined whether or not the forecast value recommended by the forming company 812 is calculated. If YES in step S305, the processing routine shifts to step S306. If NO in step S305, the processing routine shifts to step S307. In step S306, the forecast value recommended by the forming company

20   is written to the table T91 for the exception, the recommended forecast value, and the recommended basis information, and the processing routine shifts to step S307 whereupon it is determined whether or not the forecast value recommended by the transaction company 813 is calculated in step S304. If

25   YES in step S307, the processing routine shifts to step S308.

If NO in step S307, the processing routine shifts to step S309.

In step S308, the forecast value recommended by the

transaction company is written to the table T91 for the

exception, the recommended forecast value, and the

recommended basis information and, after the end of writing,

the processing routine shifts to step S309.

In step S309, the recommended basis information is

calculated based on the recommended basis information

calculating method 827. In step S310, it is determined

whether or not the basis information recommended by the

forming company 812 is calculated. If YES in step S310, the

processing routine shifts to step S311. If NO in step S310,

the processing routine shifts to step S312. In step S311,

the basis information recommended by the forming company is

written to the table T91 for the exception, the recommended

forecast value, and the recommended basis information and,

after the end of writing, the processing routine shifts to

step S312. In step S312, it is determined whether or not the

basis information recommended by the transaction company is

calculated in step S309. If YES in step S312, the processing

routine shifts to step S313. If NO in step S313, the

processing routine shifts to step S314. In step S313, the

basis information recommended by the transaction company is

written to the table T91 for the exception, the recommended

forecast value, and the recommended basis information and,

after the end of writing, the processing routine shifts to step S314.

In step S314, it is determined whether or not the automatic correction is performed based on the automatic correction 828 read in step S303. If YES in step S314, the processing routine shifts to step S315. If NO in step S314, the processing routine shifts to step S316. In step S315, the forecast value and the basis information are overwritten as the correction targets in the table T61 for the forecast value and the basis information, with the recommended forecast value and the recommended basis information.

Next, a description is given of the processing for determining the exception (step S301) with reference to the flowchart shown in Fig. 4.

In this flowchart, the processing in steps S401 to S412 is repeated for the exception criteria and the recommended value calculating method stored in the table T81 for the exception criteria and the recommended calculating method.

In step S402, the basis information relation 5 (825) is read from the exception criteria 819 for the forecast value, the threshold 820 for the exception, the target basis information 817, the lowest importance 818, and the basis information relation 1 (812). Then, the processing in steps S403 to S411 is repeated for the forecast values and the basis information in the table T61 for the forecast value and the

basis information.

In step S404, the forecast value and the basis information are read from the table T61 for the forecast value and the basis information. Further, in step S404, the

5 processing is performed to read the forecast value and the basis information of the forecast sharing company 612 replaced from the forecast forming company 611, with the same product number 613 and term 614 as those of the read forecast value and basis information. The two sets of the forecast value

10 and the basis information are the target of the determination of exception. In step S405, it is checked to determine whether or not the two sets of the forecast value and the basis information read in step S404 match the exception based on the exception criteria read in step S402. If YES in step S405,

15 the processing routine shifts to step S411. If NO in step S405, the processing routine shifts to step S406. In step S406, it is determined whether or not the set of the forecast values 615 read in step S404 matches the exception criteria 819 for the forecast value read in step S402. In step S407,

20 if it is determined in step S406 that the set of the forecast values 615 read in step S404 matches the exception criteria 819 for the forecast value, then the processing routine shifts to step S410. Further, in step S407, if it is determined in step S406 that the set of the forecast values 615 read in step

25 S404 does not match the exception criteria 819 for the forecast

value, then the processing routine shifts to step S408. In

step S408, it is determined whether or not the set of the basis

information 616 read in step S404 matches the basis

information relation 5 (825), the target basis information

5   817, and the lowest importance 818 from the basis information

relation 1 (821) read in step S402. In step S409, if YES in

step S408, the processing routine shifts to step S410 and if

NO in step S408, the processing routine shifts to step S411.

In step S410, the information on the exception is stored in

10   the table T91 for the exception, the recommended forecast

value, and the recommended basis information.

A description is given of the table T91 for the exception,

the recommended forecast value, and the recommended basis

information with reference to Fig. 9.

15   The table T91 for the exception, the recommended

forecast value, the recommended basis information stores one

exception and information on the recommended forecast value

and the recommended basis information upon the one exception.

As the information on the exception, the table T91 for

20   the exception, the recommended forecast value, and the

recommended basis information stores an exception number 911

as an identification number of the exception formed by the

forecast sharing server 11, an exception criteria number 912

for identifying the exception criteria used for the

25   determination of the exception, a forming company 913 for

forming the exception criteria, and a transaction company 914.

Further, the table T91 for the exception, the recommended

forecast value, and the recommended basis information stores

a product number 915 indicating the product determined as the

5   exception and a term 916 indicating the term determined as

the exception.

As the information on the forecast value and the basis

information determined as the exception, the table T91 for

the exception, the recommended forecast value, and the

10   recommended basis information stores a forecast value 917 of

the forming company and basis information 921 of the forming

company, as the forecast value and the basis information of

the forming company 913, and a forecast value 918 of the

transaction company and basis information 922 of the

15   transaction company as the forecast value and the basis

information of the transaction company 914. Further, the

table T91 for the exception, the recommended forecast value,

and the recommended basis information stores a forecast value

919 recommended by the forming company, basis information 923

20   recommended by the forming company, a forecast value 920

recommended by the transaction company, and basis information

924 recommended by the transaction company. Only upon

calculating the forecast value 919 recommended by the forming

company, the basis information 923 recommended by the forming

25   company, and the basis information 924 recommended by the

transaction company, the table T91 for the exception, the

recommended forecast value, and the recommended basis

information stores them and further stores nothing except for

the case of calculating them.

5   In addition, the table T91 for the exception, the

recommended forecast value, and the recommended basis

information stores correct 925 indicating whether or not the

automatic correction is performed, notification 926 to the

forming company indicating whether or not the exception and

10   the correction on a row of the correct 925 should be notified

to the forming company, and notification 927 to the

transaction company indicating whether or not the exception

and the correction on the row of the correct 925 should be

notified to the transaction company.

15   A description is given of a method using the table T91

for the exception, the recommended forecast value, and the

recommended basis information in the processing.

In step S409, the table T91 for the exception, the

recommended forecast value, and the recommended basis

20   information stores the exception number 911, the exception

criteria number 912, the forming company 913, the transaction

company 914, the product number 915, the term 916, the forecast

value 917 of the forming company, the forecast value of the

transaction number 918, the basis information 921 of the

25   forming company, the basis information 922 of the transaction

company, the notification 926 to the forming company, and the

notification 927 to the transaction company. Further, the

table T91 for the exception, the recommended forecast value,

and the recommended basis information stores "Not correct"

5   in the correct 925. In step S303, the table T91 for the

exception, the recommended forecast value, and the

recommended basis information stores the forecast value 919

recommended by the forming company and the forecast value 920

recommended by the transaction company. In step S304, the

10   table T91 for the exception, the recommended forecast value,

and the recommended basis information stores the basis

information 923 recommended by the forming company and the

basis information 924 recommended by the transaction company.

In step S307, the table T91 for the exception, the recommended

15   forecast value, and the recommended basis information stores

"Correct" in the correct 925.

Next, a description is given of the processing for

notification (step S104) with reference to the flowchart shown

in Fig. 12.

20   In the flowchart, the processing in steps S501 to S512

is repeated for the companies stored in the table T31 for the

company.

In step S502, the company number 311 is read. After

reading, the processing in steps S503 to S510 is repeated for

25   the exception, the recommended forecast value, and the

recommended basis information in the table T91 for the

exception, the recommended forecast value, and the

recommended basis information.

In step S504, the exception, the recommended forecast

5   value, and the recommended basis information are read from

the table T91 for the exception, the recommended forecast

value, and the recommended basis information. In step S505,

it is determined whether or not the company number 311 read

in step S502 matches the forming company 913. If YES in step

10   S505, the processing routine shifts to step S506. If NO in

step S505, the processing routine shifts to step S507. In

step S506, it is determined whether or not the notification

926 to the forming company is performed. If YES in step S506,

the processing routine shifts to step S509. If NO in step

15   S506, the processing routine shifts to step S510. In step

S507, it is determined whether or not the company number 311

read in step S502 matches the transaction company 914. If

YES in step S507, the processing routine shifts to step S508.

If NO in step S507, the processing routine shifts to step S510.

20   In step S508, it is determined whether or not the notification

927 to the transaction company is performed. If YES in step

S508, the processing routine shifts to step S509. If NO in

step S508, the processing routine shifts to step S510.

In step S509, the screen 41 for notification is formed

25   from the exception, the recommended forecast value, and the

recommended basis information read in step S504.

In step S511, the email including the formed screen for notification is transmitted to the email address 312 read from the table T31 for the company read in step S502.

5   The screen 41 for notification displays the following information by using all the information on the exception stored in the table T91 for the exception, the recommended forecast value, and the recommended basis information.

The exception number 911 is displayed to an exception number 428. The exception criteria number 912 is displayed
10   to an exception criteria 422. The forming company 913 is displayed to a forming company 423. The transaction company 914 is displayed to a transaction company 424. The product number 915 is displayed to a product number 425. The term
15   916 is displayed to a term 426. The correct 925 is displayed to a correction 427. If the correct 925 indicates "Correct", a word of "YES" is displayed to the correction 427. If the correct 925 indicates "not correct", a word of "NO" is displayed to the correction 427.

20   Next, if the correct 925 is "Correct", the forecast value 917 of the forming company and the forecast value 918 of the transaction company are displayed to a forecast value 4211 before correction. Further, the basis information 921 of the forming company and the basis information 922 of the
25   transaction company are displayed to basis information 4212

before correction. The forecast value 919 recommended by the forming company and the forecast value 920 recommended by the transaction company are displayed to a forecast value 4213 after correction. The basis information 923 recommended by

5   the forming company 923 and the basis information 924 recommended by the transaction company are displayed to basis information 4214 after correction. A link to the detailed screen 51 for the exception is displayed to a link 429.

If the correct 925 is "Not correct", the forecast value

10 917 of the forming company and the forecast value 918 of the transaction company are displayed to a forecast value 4311. Further, the basis information 921 of the forming company and the basis information 922 of the transaction company are displayed to basis information 4312. The forecast value 919

15 recommended by the forming company and the forecast value 920 recommended by the transaction company are displayed to a recommended forecast value 4313. The basis information 923 recommended by the forming company and the basis information 924 recommended by the transaction company are displayed to

20 recommended basis information 4314.

Rows 9101, 9102, and 9103 are displayed to exceptions 421, 431, and 441, respectively. The link to the detailed screen 51 for the exception is displayed to the link 429.

The sales company terminal 12 and the purchase company

25 terminal 13 for receiving the screen 41 for notification can

view the detailed screen 51 for the exception by clicking the link 429.

Referring to the screen 51 for the exception in Fig. 5, the processing is executed to read, from the table T91 for the exception, the recommended forecast value, and the recommended basis information, the exception, the recommended forecast value, and the recommended basis information in the row of the exception number 911 matching the exception number 428 corresponding to the link 429 clicked by the screen 41 for notification. Further, the following information is displayed by reading the forecast value and the basis information in the table T61 for the forecast value and the basis information.

The forming company 913, the transaction company 914, and the product number 915 are displayed to a forming company 521, a transaction company 522, and a product number 523, respectively.

The processing is performed to display, on time series, the forecast value 615 in the row of the forecast forming company 611 matching the forming company 521 and the transaction company 522 to a forecast value 503 of the forming company and a forecast value 504 of the transaction company for a term 502. Further, the processing is performed to display, on time series, the basis information 616 in the row of the forecast forming company 611 matching the forming

company 521 and the transaction company 522 to basis

information 505 of the forming company and basis information

506 of the transaction company for the term 502.

A column 5001 of the term 502 corresponding to the term

5   916 displays the following. That is, when the correct 925

indicates "Correct", the exception number 911 is displayed

to the exception number 517. Further, the forecast value 917

of the forming company, the forecast value 918 of the

transaction company, the basis information 921 of the forming

10   company, and the basis information 922 of the transaction

company are displayed to a before-correction value 511 of the

forming company, a before-correction value 512 of the

transaction company, a before-correction basis information

513 of the forming company, and a before-correction basis

15   information 514 of the transaction company, respectively.

The "Automatic correction" is displayed to a status 516, and

a list 541 is displayed to an operation 516. Correction

values are inputted to columns of the forecast value 503 of

the forming company, the forecast value 504 of the transaction

20   company, the basis information 505 of the forming company,

and the basis information 506 of the transaction company.

"Correct to input value" is selected from the list 541, then,

a determine button 531 is pressed, and the values are corrected

to the input values. "Reset correction" is selected from the

25   list 541, then, the forecast value 615 and the basis

information 616 in a corresponding row in the table T61 for the forecast value and the basis information are overwritten by using the before-correction basis information 514 of the transaction company from the before-correction value 512 of

5 the forming value.

When the correct 925 indicates "Not correct", as shown on a screen 52 for the exception in Fig. 14, the exception number 911 is displayed to the exception number 517. Further, the forecast value 919 recommended by the forming company,

10 the forecast value 920 recommended by the transaction company, the basis information 923 recommended by the forming company, and the basis information 924 recommended by the transaction company are stored in a value 508 recommended by the forming company, a value 509 recommended by the transaction company,

15 basis information 510 recommended by the forming company, and basis information 511 recommended by the transaction company, respectively. The "Exception" is displayed to the status 516, and a list 542 is displayed to the operation 516. Correction values are inputted to columns of the forecast value 503 of

20 the forming company, the forecast value 504 of the transaction company, the basis information 505 of the forming company, and the basis information 506 of the transaction company. "Correct to input value" is selected from the list 542, the determine button 531 is pressed and, then, the forecast value

25 615 and the basis information 616 in a corresponding row in

the table T61 for the forecast value and the basis information
are corrected to the input values. Further, "Correct to
recommended value" is selected from the list 542 and, then,
the forecast value 615 and the basis information 616 in a

5 corresponding row in the table T61 for the forecast value and
the basis information are overwritten by the basis information
510 recommended by the transaction company from the value 508
recommended by the forming company.

Upon clicking the link 429 on the screen 41 for

10 notification, the screen 51 for the exception is displayed.
Upon clicking a link 439, the screen 52 for the exception is
displayed as shown in Fig. 14. Upon clicking a link 449, a
screen 53 for the exception is displayed as shown in Fig. 15.
Here, one exception, one recommended forecast value, and one

15 piece of the recommended basis information are displayed on
one screen. However, a plurality of exceptions, recommended
forecast values, and pieces of recommended basis information
may be displayed on one screen.

The detailed description is given of the embodiment.

20 Hereinbelow, a description is given of a specific common
forecasting method with reference to Figs. 6 to 9.

The sales company (company No. 1001) and the purchase
company (company No. 1002) previously set the definitions of
the basis information in rows 7101 to 7112 shown in Fig. 7.

25 The sales company (company No. 1001) sets the exception

criteria and the recommended value calculating methods in rows

8101 to 8106 shown in Fig. 8. The sales company (company No.

1001) registers the forecast values and the basis information

in rows 6101 to 6112 shown in Fig. 6. The purchase company

5   (company NO. 1002) registers the forecast values and the basis

information in rows 6201 to 6212.

The forecast sharing server 11 executes the following

processing sequence.

The exception criteria stored in the row 8101 is read.

10   Based on the forming company 812, the transaction company 813,

the product number 814, the start of term 815, and the end

of term 816 of the exception criteria, the set of the forecast

value and the basis information for the same term become the

forecast value and the basis information applied to the

15   exception criteria, among the set of forecast value and basis

information of the sales company (company No. 1001) as the

forecast forming company 611, the purchase company (company

No, 1002) as the forecast forming company 612, the product

number 613 indicating 0001, and the term of the first to fourth

20   weeks in June and the set of forecast value and basis

information corresponding to the purchase company (company

No. 1002) as the forecast forming company 611, the sales

company (company No. 1001) as the forecast sharing company

612, the product number 613 indicating 0001, and the term of

25   the first to fourth weeks in July. In accordance with the

applying criteria, the set of rows 6101 and 6201, the set of rows 6102 and 6202, the set of rows 6103 and 6203, and the set of rows 6104 and 6204 are detected as the forecast value and the basis information applied to the exception criteria.

5   The exception is determined by applying the exception criteria of the forecast value and the exception criteria of the basis information to the set of rows 6101 and 6201. Exception criteria 1 for the forecast value set by the exception criteria 819 for the forecast value is applied to

10   a forecast value 100 in the row 6101 and a forecast value 95 in the row 6201. The exception criteria 1 correspond to "No exception" shown by the radio button 251 in Fig. 2 and, therefore, the exception is not determined. The exception criteria for the basis information correspond to a basis

15   information relation 3 (823) in basis information relations 1 (821) to 5 (825), that is, they correspond to "basis information of forming company ⊂ basis information of transaction company (no matching)" in the check box 263 in Fig. 2. No basis information exists in the rows 6101 and 6201

20   and therefore no basis information relation 3 (823) is established. Thus, the exception is not determined in the rows 6101 and 6201. In the above description, since the exception is not determined in both the forecast value and the basis information, the rows 6101 and 6201 are determined

25   to have no exception.

The exception is determined by applying the exception criteria of the forecast value and the exception criteria of the basis information to the set of rows 6102 and 6202. Exception criteria 7 for the forecast value set by the exception criteria 819 for the forecast value are applied to the forecast value 100 in the row 6102 and a forecast value 206 in the row 6202. The exception criteria 7 correspond to "|forecast value of forming company - forecast value of transaction company| ≥ threshold for exception" of the radio button 257 shown in Fig. 2. The threshold for the exception 820 is 30 and, therefore, the forecast values matches the exception criteria 7 and are determined as the exceptions. Since the forecast values are determined as the exceptions, the information on the exception is stored as shown by the row 9101 in Fig. 9. At this time point, the recommended value is not calculated and rows 919, 920, 923, and 924 are not described.

Upon determining whether or not the set of rows 6103 and 6203 and the set of rows 6104 and 6204 have the exception, they are determined to have no exception.

As mentioned above, the determination of the exception using the exception criteria in the row 8101 ends.

Upon determining the exception by use of the exception criteria in rows 8202 to 8206, the set of rows 6105 and 6205 is determined as the exception by use of the exception criteria

in a row 8204, the set of rows 6109 and 6209 is determined as the exception by using the exception criteria in a row 8205, and the information on the exception is stored in the rows 9102 and 9103.

5   A description is given of the processing for determining the two exceptions.

The exception criteria 819 of the forecast value in the rows 8204 and 8205 indicate "No exception". Thus, the forecast values in the set of rows 6105 and 6205 and the set

10   of rows 6109 and 6209 are not determined as the exceptions.

The basis information in the rows 6105 and 6205 is basis information K1 (importance 2) and basis information K4 (importance 4), respectively. Upon using the basis information 816 as the target in the row 8204, namely, "most

15   important basis information" to the basis information in the rows 6105 and 6205, only the basis information K4 having importance 4 is determined to have the exception. It is determined based on the basis information relation 1 (821) in the row 8204 that exception criteria 3 for the basis

20   information correspond to "basis information of forming company ⊂ basis information of transaction company (no matching)" in the check box 263 in Fig. 2. The basis information as the target of the forming company, that is, the row 6105 does not exist, and the basis information as the

25   target of the transaction company, that is, the row 6205 is

the basis information K4. Consequently, the basis
information in the row 6205 matches the exception criteria
and, thus, is determined as the exception.

The basis information in the rows 6109 and 6209 is basis
5   information K2 (magazine feature and importance 4) and basis
information K5 (sale 50% off and importance 4). Upon using
the basis information 816 as the target in the row 8205, namely,
"most important basis information" to the basis information
in the rows 6109 and 6209, it is determined whether or not
10 basis information K2 and the basis information K4 having the
importance 4 have the exception. It is determined based on
the basis information relations 1 (821) to 5 (825) in the row
8204 that exception criteria 4 and 5 for the basis information
correspond to "basis information of forming company ∩ basic
15 information of transaction company" in the check box 264 in
Fig. 2 or "basis information of forming company ⊄ basic
information of transaction company". When the basis
information matches the exception criteria 4 or 5, it is
determined as the exception. The basis information as the
20 target of the forming company, that is, of the row 6109 is
the basis information K2 and the basis information as the
target of the transaction company, that is, of the row 6209
is the basis information K5. The basis information in the
row 6209 matches the exception criteria 5 as "basis
25 information of forming company ⊄ basic information of

transaction company" and, therefore, it is determined as the exception.

Next, the forecast sharing server 11 forms the recommended values and automatically corrects the values, for the exceptions stored in the rows 9101 to 9103 shown in Fig. 9 with reference to the following processing routine (1) to (3).

(1) Formation of recommended value and automatic correction for exception in row 9101

The row 8101 having the exception criteria number (exception criteria No. 1) is read from the exception criteria No. 912 (exception criteria No. 1) in the row 9101. The recommended forecast value calculating method 826 indicates 3, namely, "match forecast value of forming company to that of transaction company" corresponding to the radio button 273 shown in Fig. 2. The recommended forecast value 919 of the forming company is calculated as 206 by applying the recommended forecast calculating method 826 corresponding to the contents of the radio button 273 shown in Fig. 2 to the forecast value 917 of the forming company (forecast value: 100) and the forecast value 918 of the transaction company (forecast value: 206).

The basis information 817 as the target in the row 8101 is 3, that is, "most important basis information" by referring to the radio button 234 shown in Fig. 2. The recommended basis

information calculating method 827 is 3, that is, "match basis

information of forming company to that of transaction company"

corresponding to the radio button 283 shown in Fig. 2. The

basis information 923 recommended by the forming company is

5   calculated as 2 by applying the basis information 817 and the

recommended basis information calculating method 827 to the

basis information 921 of the forming company (no basis

information) and the forecast value 918 of the transaction

company (basis information 2 and importance 2).

10   Next, since the automatic correction 828 in the row 8101

indicates "YES", the forecast value 615 in the row 6102

matching the forming company 913, the transaction company 914,

the product number 915, and the term 916 in the row 9101 is

overwritten by the forecast value 919 recommended by the

15   forming company (forecast value 206).

        (2) Formation of recommended value and automatic

correction for exception in row 9102

        The row 8104 having the exception criteria (exception

criteria No. 4) is read from the exception criteria number

20   912 (exception criteria No. 4) in the row 9102. The

recommended forecast value calculating method 826 is 3, that

is, "match forecast value of forming company to that of

transaction company". The forecast value 919 recommended by

the forming company is calculated as 332 by applying the

25   recommended forecast value calculating method 826 to the

forecast value 917 of the forming company (forecast value 196)
and the forecast value 918 of the transaction company
(forecast value 332).

The basis information 817 as the target in the row 8104

5   is 3, that is, "most important basis information" by referring
to the radio button 234 shown in Fig. 2. The recommended basis
information calculating method 827 is 3, that is, "match basis
information of forming company to that of transaction company"
corresponding to the radio button 283 shown in Fig. 2. The

10   basis information 923 recommended by the forming company is
calculated as 4 by applying the basis information 817 and the
recommended basis information calculating method 827 to the
basis information 921 of the forming company (basis
information 2 and importance 2) and the forecast value 918

15   of the transaction company (basis information 4 and importance
4).

Since the automatic correction 828 in the row 8104
indicates "NO", the automatic correction is not performed.

(3) Formation of recommended value and automatic

20   correction for exception in row 9103

The row 8105 having the exception criteria (exception
criteria No. 5) is read from the exception criteria number
912 (exception criteria No. 5) in the row 9103. The
recommended forecast value calculating method 826 is 1, that

25   is, "Not calculate" corresponding to the radio button 271

shown in Fig. 2 and the recommended forecast value is not calculated.

The basis information 817 as the target in the row 8105 is 3, that is, "most important basis information" by referring to the radio button 234 shown in Fig. 2. The recommended basis information calculating method 827 is 5, that is, "add basis information in at least one of both companies to that therein" corresponding to the radio button 285 shown in Fig. 2. The basis information 923 recommended by the forming company and the basis information 924 recommended by the transaction company are calculated as 4 and 12 by applying the basis information 817 and the recommended basis information calculating method 827 to the basis information 921 of the forming company (basis information 11 and importance 4) and the forecast value 918 of the transaction company (basis information 4 and importance 4), respectively.

The automatic correct 828 in the row 8105 is "NO" and therefore the automatic correction is not executed.

Finally, the forecast sharing server 11 sends a notification indicating the exception, the recommended forecast value, and the recommended basis information stored in the rows 9101 to 9103 shown in Fig. 9 to the sales company terminal 12 and the purchase company terminal 13 in accordance with the following processing routine.

The company number 311 (company No. 1001) is read from

a row 3101 in the table T31 for company shown in Fig. 13, and

it is searched in which row of the rows 9101 to 9103 the forming

company 913 or the transaction company 914 matches the company

number 311 (company No. 1001). All the forming companies 913

5   in the rows 9101 to 9103 indicate company No. 1001, that is,

match the company number 311 in the row 3101. Then, the

notification 926 to the forming company in the row 9101 is

read. Since the notification 926 to the forming company in

the row 9101 indicates "YES", the exception 421 shown in Fig.

10   10 is formed by use of columns 911 to 925. Similarly, the

notification 926 to the forming company in the rows 9102 to

9103 indicates "YES", the exceptions 422 and 423 shown in Fig.

10 are formed to the rows 9102 and 9103. The above-formed

screen 41 for notification is transmitted to the email address

15   312 (email address: mail@hanbai.co.jp) of the row 3101.

The company number 311 (company No. 1002) is read from

a row 3102 in the table T31 for company shown in Fig. 13, and

it is searched in which of the rows 9101 to 9103 the forming

company 913 or the transaction company 914 matches the company

20   number 311 (company No. 1002). All the transaction companies

914 in the rows 9101 to 9103 indicate company No. 1002, that

is, match the company number 311 in the row 3102. Then, the

notification 927 to the transaction company in the row 9101

is read. Since the notification 927 to the transaction

25   company in the row 9101 indicates "YES", an exception 471 shown

in Fig. 11 is formed by using the columns 911 to 925. The notification 926 to the forming company in the rows 9102 and 9103 indicates "NO" and therefore the information on the exception is not displayed on the screen for notification.

5 The above-formed screen 45 for notification is transmitted to the email address 312 (email address: mail@hanbai.co.jp) of the row 3102.

The forecast sharing server 11 displays the screen 51 for the exception shown in Fig. 5 by use of the information

10 in the table T61 for the forecast value and the basis information shown in Fig. 6 and the information in the table T91 for the exception, the recommended forecast value, and the recommended basis information shown in Fig. 9 upon clicking the link 414 or the link 464 by the sales company

15 terminal 12 or the purchase company terminal 13.

According to the embodiment, the basis information is added to the forecast value and the exception for the basis information is determined. Thus, it is possible to find the different estimation of the future demand which is not

20 conventionally found because the forecast values accidentally match each other. Upon determining the exception, the basis information is displayed, thereby easily specifying the factor for the exception. Further, it is possible to automatically calculate the recommended value for

25 the correction of the forecast value and to easily correct

the forecast value by use of the basis information shared by the sales company and the purchase company upon determining the exception.

The present invention produces significant effects that it is possible to provide determination of an exception so as to detect the different estimation of a future demand which is not conventionally found because the forecast values for the demand accidentally match each other, to easily specify an exception factor when the exception is determined and to easily correct the forecast value.